

1. (amended) A method for the regeneration of a plant comprising the steps of:

- a) providing a plant explant comprising a shoot meristem or primordia;
- b) culturing the explant in a media comprising an apical dominance inhibitor selected from the group consisting of dikegulac, methyl laurate and octadecyl-polyethoxyethanol to induce bud or shoot formation from the explant; and
- c) rooting the explants containing buds or shoots to produce a plant.

9. (amended) The method of claim 5, wherein the dikegulac is present at a concentration from about 5 to about 5000 mg/L.

13. (amended) The method of claim 12, wherein said cotton plant is a commercial variety or elite line.

15. (amended) The method of claim 1, wherein said explant is the zygotic embryo or an explant thereof.

16. (amended) The method of claim 1, wherein said shoot meristem or primordia explant is a node, the cotyledonary node, shoot tip, or an explant thereof.

17. (amended) The method of claim 1, wherein said shoot meristem or primordia explant is an in vitro-produced shoot, tissue culture, shoot culture, or an explant thereof.

18. (amended) The method of claim 1, wherein the media is MS, MS/B5, GD1, Gamborg's media, WPM, modified LP, DKW, Nitsch and Nitsch media, or Schenk and Hildebrandt media.

19. (amended) A method for the regeneration of a transgenic plant comprising the steps of:

- a) providing an explant of a plant comprising a shoot meristem or primordia;
- b) introducing a recombinant DNA vector into the explant to generate a transformed explant;